

IN THE CLAIMS

Please amend the claims as follows:

1. (Original) A data processing apparatus for performing a predetermined predictive calculation on input data using a predictive coefficient, comprising:
first storing means for storing a first predictive coefficient obtained by learning;
instructing means for instructing conversion of the first predictive coefficient;
and
first calculating means for calculating a second predictive coefficient from the first predictive coefficient according to a predetermined transform method when conversion is instructed by said instructing means.

2. (Original) The data processing apparatus according to Claim 1, wherein the first calculating means calculates and outputs the second predictive coefficient when conversion is instructed by the instructing means, and outputs the first predictive coefficient without calculation of the second predictive coefficient when conversion is not instructed by the instructing means.

3. (Currently Amended) The data processing apparatus, according to Claim 2, further comprising:

[[a]] second storing means for storing the first predictive coefficient or the second predictive coefficient output from the first calculating means.

4. (Currently Amended) The data processing apparatus according to Claim 3, further comprising:

[[a]] first extracting means for extracting, from the input data, first data;

[[a]] determining means responsive to the first extracting means for
determining a class based on the first data;

[[a]] second extracting means for extracting second data calculated from the
input data; and

[[a]] third calculating means for calculating output data based on the second
data extracted by the second extracting means and the first predictive coefficient or
the second predictive coefficient stored by the second storing means,

wherein the second storing means supplies the first predictive coefficient or
the second predictive coefficient corresponding to the class determined by the
determining means to the third calculating means.

5. (Currently Amended) The data processing apparatus according to Claim 4,
wherein the first storing means stores the first predictive coefficient ~~[[is]]~~ being a
predictive coefficient determined for each class based on third data serving as a
student signal corresponding to the input data, and fourth data serving as a teacher
signal corresponding to the output data.

6. (Currently Amended) The data processing apparatus according to Claim 4,
wherein the first extracting means extracts the input data ~~comprises~~ including
composite signal data, and the third calculating means calculates the output data
~~comprises~~ including component signal data defined as data obtained by converting the
component signal data according to the predetermined transform method.

7. (Currently Amended) The data processing apparatus according to Claim 4, further comprising:

decoding means for selecting data input and the output data generated by the third calculating means and for decoding the selected data input.

8. (Original) The data processing apparatus according to Claim 1, wherein the instructing means designates the transform method, and

the first calculating means calculates the second predictive coefficient from the first predictive coefficient stored by the first storing means according to the transform method instructed by the instructing means.

9. (Original) The data processing apparatus according to Claim 8, wherein the first calculating means includes a third storing means for storing a transform formula corresponding to the transform method and for selecting the transform formula according to the transform method designated by the instructing means, and calculates the second predictive coefficient from the first predictive coefficient based on the transform formula stored by the third storing means.

10. (Original) The data processing apparatus according to Claim 9, wherein the third storing means stores a transform formula corresponding to an orthogonal transform as the transform formula corresponding to the transform method.

11. (Currently Amended) A data processing apparatus for performing a predetermined predictive calculation on input data using a predictive coefficient, comprising:

a first memory ~~for storing~~ configured to store a first predictive coefficient obtained by learning;

a designation unit configured to instruct conversion of the first predictive coefficient; and

a coefficient calculation unit configured to calculate a second predictive coefficient from the first predictive coefficient according to a predetermined transform method when conversion is instructed by the designation unit.

12. (Currently Amended) The data processing apparatus according to Claim 11, wherein the ~~first~~ coefficient calculation unit is configured to calculate ~~calculates and outputs~~ output the second predictive coefficient when conversion is instructed by the designation unit, and ~~outputs~~ to output the first predictive coefficient without calculation of the second predictive coefficient when conversion is not instructed by the designation unit.

13. (Currently Amended) The data processing apparatus, according to Claim 12, further comprising:

a second memory ~~for storing~~ configured to store the first predictive coefficient or the second predictive coefficient output from the coefficient calculation unit.

14. (Currently Amended) The data processing apparatus according to Claim 13, further comprising:

a first extraction unit ~~for extracting~~ configured to extract, from the input data, first data;

a classification unit, responsive to the first ~~extracting means for determining~~
extraction unit, configured to determine a class based on the first data;

a second extraction unit ~~for extracting~~ configured to extract second data
calculated from the input data; and

a predictive calculation unit configured to calculate output data based on the
second data extracted by the second extraction unit and the first predictive coefficient
or the second predictive coefficient stored by the second memory,

wherein the second memory ~~supplies~~ is configured to supply the first
predictive coefficient or the second predictive coefficient corresponding to the class
determined by the classification unit to the predictive calculation unit.

15. (Currently Amended) The data processing apparatus according to
Claim 14, wherein the first memory is configured to store the first predictive
coefficient ~~[[is]]~~ being a predictive coefficient determined for each class based on
third data serving as a student signal corresponding to the input data, and fourth data
serving as a teacher signal corresponding to the output data.

16. (Currently Amended) The data processing apparatus according to
Claim 14, wherein the first extraction unit is configured to extract from the input data
~~comprises~~ comprising composite signal data, and the predictive calculation unit is
configured to calculate the output data ~~comprises~~ comprising component signal data
or data obtained by converting the component signal data according to the
predetermined transform method.

17. (Currently Amended) The data processing apparatus according to Claim 14, further comprising:

a decoder ~~for selecting~~ configured to select data input, and the output data generated by the predictive calculation unit and ~~for decoding~~ to decode the selected data input.

18. (Currently Amended) The data processing apparatus according to Claim 11, wherein the designation unit is configured to designate ~~designates~~ the transform method, and

the coefficient calculation unit ~~calculates~~ is configured to calculate the second predictive coefficient from the first predictive coefficient stored by the first memory according to the transform method instructed by the ~~instructing means~~ designation unit.

19. (Currently Amended) The data processing apparatus according to Claim 18, wherein the ~~first~~ coefficient calculation unit includes a third memory ~~for storing~~ configured to store a transform formula corresponding to the transform method and ~~for selecting~~ to select the transform formula according to the transform method designated by the designation unit, and ~~calculates~~ is configured to calculate the second predictive coefficient from the first predictive coefficient based on the transform formula stored by the third memory.

20. (Currently Amended) The data processing apparatus according to Claim 19, wherein the third memory is configured to store ~~stores~~ a transform formula

corresponding to an orthogonal transform as the transform formula corresponding to the transform method.

21. (Currently Amended) A data processing method for a data processing apparatus for performing a predetermined predictive calculation on input data using a predictive coefficient, comprising:

storing a first predictive coefficient obtained by ~~kerneling~~ learning;

instructing conversion of the first predictive coefficient; [[and]]

calculating a second predictive coefficient from the stored first predictive coefficient according to [[the]] a predetermined transform method when conversion is instructed in said instructing step; and

converting the input data into output data based on the first predictive coefficient or the second predictive coefficient.

22. (Currently Amended) A computer readable ~~carrier including~~ memory medium embodied with computer program instructions that cause a computer to perform a predetermined predictive calculation on input data using a predictive coefficient, the computer program comprising:

storing a first predictive coefficient obtained by learning;

instructing conversion of the first predictive coefficient which is stored and which is obtained by learning; [[and]]

calculating the second predictive coefficient from the stored first predictive coefficient according to a predetermined transform method when conversion is instructed in said instructing step; and

converting the input data into output data based on the first predictive coefficient or the second predictive coefficient.

23. (Canceled)